

CLAIMS

What is claimed is:

1. A support assembly for a vehicle closure member comprising:
an arm pivotally mounted about a pivot point and comprising first and second segments; and
a spring assembly pivotally attached at said first segment of said arm and biasing said second segment against a vehicle closure member.
2. The assembly as recited in claim 1, further comprising a hinge assembly to move the vehicle closure member between an open and closed position.
3. The assembly as recited in claim 1, wherein a second segment of said arm biases the vehicle closure member toward said open position.
4. The assembly as recited in claim 1, wherein a second segment of said arm comprises an extension portion extending transversely from said second segment of said arm and into contact with the vehicle closure member.
5. The assembly as recited in claim 1, wherein a distance between said pivot and said second segment is greater than a distance between said pivot and said first segment.
6. The assembly as recited in claim 1, wherein said spring assembly comprises first and second segments disposed along a common axis and said pivot point is spaced apart from said axis.

7. The assembly as recited in claim 6, wherein said pivot point is spaced apart from said axis a distance such that said first segment is biased away from the vehicle closure member and said second segment of said arm is biased upward against the vehicle closure member.

8. The assembly as recited in claim 1, comprising a roller attached to said second segment of said arm for contacting the vehicle closure member.

9. The assembly as recited in claim 1, wherein said spring assembly comprises a gas spring.

10. The assembly as recited in claim 1, wherein said spring assembly comprises a pneumatic spring.

11. A gas spring assembly for a vehicle closure member comprising:
a gas spring comprising a support segment and a base segment, said support segment pivotally attached to the vehicle closure member; and

an arm comprising first and second segments and a pivotal attachment disposed therebetween, said first segment pivotally attached to said base segment of said gas spring and said second segment biased by said gas spring against the vehicle closure member.

12. The assembly as recited in claim 11, wherein said second segment of said arm biases the vehicle closure member toward an open position.

13. The assembly as recited in claim 11, wherein said second segment of said arm comprises an extension portion extending transversely from a second segment of said arm and into contact with the vehicle closure member.

14. The assembly as recited in claim 11, wherein a distance between said pivot and said second segment is greater than a distance between said pivot and said first segment.

15. The assembly as recited in claim 11, wherein said support segment and base segment are disposed along a common axis and said pivot point is spaced apart from said axis.

16. The assembly as recited in claim 15, wherein said pivot point is spaced apart from said common axis a distance such that said first segment is biased downward and said second segment of said arm is biased upward against the vehicle closure member.

17. The assembly as recited in claim 11, comprising a roller attached to said second segment of said arm for contacting the vehicle closure member.